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# THE CHRONICLE

## *of Early American Industries*

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### **Street Lighting**

by BERTRAM K. LITTLE

The 18th century brought great advances in street lighting both abroad and for the first time in this country. By 1702 the streets of Copenhagen were widely lighted by lanterns, very much like those in Holland. The latter city refused to have flambeaux because of fear of fire; servants carried dark lanterns for their masters. During this century many cities on the Continent and in England were added to the number whose streets were lighted at public charge. The big progressive step, which came early in the century, is the replacing of lanterns with street lamps having glass globes and reflectors, using oil lamps instead of candles and being regularly cleaned. In France in 1703 a M. Fabre proposed specially designed lamps with reflectors and chimneys. From a picture it looks as if he had used crude magnifying lenses, but these are not mentioned in the description. By 1741 Paris had one man in charge of every ten lanterns and every detail of their care and maintenance was carefully regulated. Three years later, Chateau-blanc invented a reflector lantern which cast no shadows below it, but it was somewhat costly, and had the disadvantages of growing dull because of the smoke, and of going out from congealed oil in cold weather. To offset the latter fault, M. de Lierville invented a very thin metal stem which he called a heater, and which conducted heat from the flame down into the oil reservoir.

About 1765, M. Patté developed a street light attached to a building, raised and lowered the length of an iron rod by means of a little weight; the lamp in it tipped automatically to use up the last drop of oil. It burned oil made from beech-nuts which M. Patté claimed would burn as well as olive oil at about  $\frac{1}{3}$  the cost. He arranged it so that one wick would produce three lights — one natural and two

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### **Dating Old Buildings**

by LORING McMILLEN

#### **I—Stone and Brick**

In general there are three methods of dating an old building; first by documentary means, second by the style of architecture, and last by a study and analysis of its parts and the method of their construction.

The first two methods are well known. When sufficient evidence exists, as with most of our better known buildings, no further proof is necessary. However, as is more often the case with lesser buildings, documentary evidence is inconclusive or wholly lacking and so many renovations have been made that the original architectural style has been lost. The third method has then to be used. Too little is known about this method, since many early details of construction persisted with minor changes for many years and for a similar reason others have no place in written history. However, exhaustive study of many examples, and of records, is gradually building a check list of data which can be applied to any structure with reasonable accuracy. The following data was drawn from a study of buildings in the vicinity of New York, chiefly Staten Island, first settled by the Dutch in 1639 and later by the French and the English. It is applicable equally, with the usual local variations, to buildings elsewhere.

Materials commonly used in building have been wood, stone and brick. In New England, tradition and an abundant supply of timber led to the construction of the typical New England frame house. Stone and brick were used sparingly. In cosmopolitan and Dutch New York and neighboring New Jersey, the frame house shared equal favor with the traditional Dutch brick house and the French stone house. In Dutch, or German, Pennsylvania, due to the abundance of the material and a knowledge of its use, the stone house predominated, while in the

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South the brick building was generally constructed.

Stone walls were constructed 22 inches in thickness and consisted of an outer and an inner wall, bonded to each other by overlapping the larger stones and the keying effect of the smaller ones. This thickness was the natural result of the size of stones which could be conveniently handled. Variations exist such as in foundation walls, which were thicker, and in large buildings. Early mortar was made of lime and sand and unless locally available used only in pointing, the remainder of the wall being laid up in ordinary clay. At first, and until as late as about 1720, much of the early lime for mortar was obtained from the burning of oyster shells, and mortar thus made can be readily recognized by the presence of large calcinated pieces of shell.

Legislation in the various provinces discouraged this practice, New York forbid the taking of oyster shells for the burning of lime in 1704. Lime burned from limestone came into use about 1730 with the discovery of limestone deposits. The early mortar thus made shows large particles of the stone, but with the gradual improvement in kilns, and in burning, these particles after 1830 can no longer be discerned.

Early stone walls show little attention paid to coursing or dressing, being laid up in what is known as "undressed random rubble," that is the stones were used as found, and placed without continuous horizontal joints. Gradually greater care was used in dressing, that is, in tooling or in squaring the stones and laying them up in courses. Greater care was also used, in quoining on the corners, or "long and short work," as it was called. By 1800 and earlier we have the beautiful stonework of the buildings of Pennsylvania and of northern New Jersey, but by 1820 stone as a common wall material ceased generally to be used in all, but public buildings.

While records exist referring to the importation of brick at New York and other colonial ports, the tradition of Dutch and English brick brought from the old country is largely unsubstantiated. To the contrary, ample evidence exists showing the local manufacture of brick from the earliest times to the present. Unfortunately, little concerning age can be deducted from the size, texture or color of bricks. Various sizes were employed in all sections notwithstanding that on June 19, 1703, New York Province standardized by law the size of manufactured brick

at  $2\frac{1}{2} \times 4\frac{1}{4} \times 9$  inches. This was the most generally accepted size and prevailed until about 1790 when the present size of  $2 \times 4 \times 8$  inches came into use.\*

Old bricks, of course, were hand made, that is hand processed in wooden molds open at the top. They thus show five smooth sides and one sanded or rough side. No marking was made upon these bricks to the despair of the historian, and determination of their age can only be hazarded by increasing evenness of texture, hardness and depth of color of later examples. Later bricks were also more uniformly and carefully made and as a result the joints between are narrower. Bonds, such as English or Dutch, were used at all times and thus can not be used for dating of brickwork.

Stone and brick were both used in fireplace, hearth, and floor construction; stone more generally in the older examples, particularly in the kitchen fireplaces where its use lasted until about 1750.

The tools formerly employed by the mason and bricklayer were similar to those in use today: the stone mason's hammer for rough shaping stone; the three-cornered trowel, the most useful tool of all for laying mortar, rough pointing and shaping brick — a beautiful tool to watch in the hands of a skilled workman; the rectangular smoothing trowel for plastering work; the mason's level, at first a plumb bob on a T frame; then about 1830-40 the spirit level — much longer than the carpenter's level; the lead plumb bob suspended from a string; the "hawk," a square board with a round handle set at right angles for holding mortar while plastering.

The "hawk" and the smoothing trowel were actually plasterers' tools but in former years the trades of mason, bricklayer and plasterer were one, even as they are today, particularly among independent workers. Old plaster followed the same rules as mortar, being made in the same manner. Plaster in the stone houses was applied directly to the stone in one thin coat. In the frame house plaster at first also was one coat mixed with the hair of some animal for greater binding and elimination of cracks. About 1790 to 1800, two coats, a scratch coat and a fine coat began to be applied. The three coat plastering job is a modern improvement.

\*"Dutch Brick" commonly spoken of in New York, originally referred to the larger *size* brick. In more recent times "Dutch Brick" has mistakenly been thought to suggest the actual place of origin, as being in Holland.—Ed.

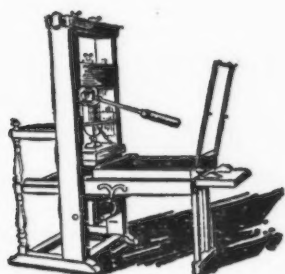
## Early American Industries

### Hand Printing Presses of the Last Century

by GLOVER A. SNOW

Not much has been written or published about hand and treadle printing presses of the nineteenth century, altho their introduction had a profound effect on American life, and thousands of people either used or were well acquainted with them.

Most of us are familiar with pictures of the old Washington hand press, or various similar machines. One of the predecessors of the Washington appeared in 1939 on a postage stamp commemorating the three hundredth anniversary of the first printing press in America. This general type of machine — if it can be called that — was, up to 1800, the only kind of printing press available to a printer, whether he happened to be a newspaper publisher or general practitioner. As a matter of fact, he was usually both in those days.



The Stephen Daye Press, Cambridge, Mass. (1639)

Early in the century, however, the printing press, along with other machines, received the attention of numerous inventors, and there began to be a decided difference in the appearance of presses used for different kinds of printing. While presses for newspapers, magazines and books started to become bigger and more complicated almost immediately, so that more pages could be printed at a time, and faster, it was realized that job printers received a lot of orders for small work — cards, stationery, handbills, and the like, which could best be handled on machines no larger than they had been in the past. Besides, the average printer had no mechanical power available, and was obliged to use muscular effort, either hand or foot. The bigger the machine, the more difficult to keep going at a sustained speed, so presses of small and medium size were in great demand.

In addition to foot power jobbers, all kinds of which were marketed until George Gordon produced one in 1852 which more or less stabilized their design, there were a lot of hand operated machines — often called "amateur" presses, probably for want of a better description — which found ready sale and use among not only the youthful element of the population, but stores, factories, home shops, and by printers themselves.



"Mrs. Cowper's Parlour Printing Press" appeared in England at least as early as 1839, and I have seen a book of instructions, unfortunately without pictures or address, but dated 1844, of "The Portable Printing Office, with Plain Directions for its use, to Allow Everyone to be His Own Printer." However, the first press to make any decided impression in this country was the Lowe, in 1856, which received a silver medal at the fair of the American Institute in the Crystal Palace, New York, 1857. This press had one peculiarity, not found in any other press built before or since — a conical roller which was used to squeeze the paper against the type and give the printed impression. The only possible virtue this might have would be in reducing the space occupied by the press.

The full operation consisted in placing the type form in the chase or frame, laying it face up on the bed of the press, using a hand roller to ink the type, placing a sheet of paper over the type, and bringing the conical roller around over the paper to make the impression. More or less squeeze could be obtained by turning up or down the nuts which held the cylinder to the post on which it swung. The first Lowe presses had a wooden cylinder, which later gave place to cast iron.

The Adams Cottage Press, which was widely used during the Civil War by armies in the field, hospitals, camps and on ships of the Navy, employed a straight cylinder instead of a conical one. This cylinder was fixed, and the type form, previously inked and covered with a sheet of paper (as on the Lowe) was pulled under the roller by means of a crank handle. This press not only took the place of present day standard printing machines, but of necessity did the work which nowadays is given to stencil duplicators, mimeographs and other such devices.

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During the Civil War a modification of the Adams machine was brought out, on which the crank was geared to the roller as well as the press bed, and called the Army. Army presses were made and sold as late as 1906, but the vast majority of them were built in the sixties, seventies and eighties. They were used not only for job printing, but also to get out small town weekly newspapers.

While the Adams and the Army presses were filling an important need, other inventors had their own ideas about the proper way to print small work, and in the year 1869 Benjamin O. Woods, of Boston, made his bid for the business with the Novelty, a press which for about ten years was the leader in its field—with chase or frame sizes from 5 x 7 inches to 10¾ x 20. Like the Army and Adams Cottage, the type was inked by hand, the ink having been previously spread out on the horizontal plate at the top, from which it was transferred to the type by a hand roller (brayer). The paper to be printed was placed on the platen (plate) opposite the chase. The user brought his foot down on the treadle, which was fastened by a rod to the toggle, thus supplying the closing operation and squeeze. Adjustment for more or less impression was supplied by thumbscrews which moved the axis of the platen backward and forward.



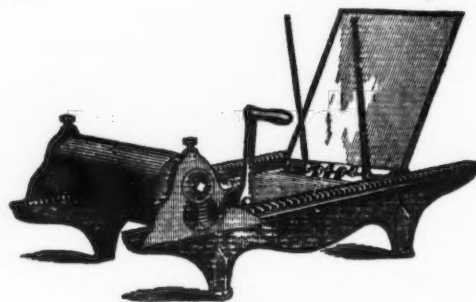
Novelty Press

The writer has a Lowe press, and a Novelty. Compared to present day self inking hand presses (the simplest printing devices now available) they are curious contraptions, but untold thousands of jobs were laboriously run off on them in their day.

Some of these and other machines which were made about this time may be seen at the Franklin Institute in Philadelphia, and also at the Edison Institute in Dearborn, Michigan.

The Lowe and the Novelty were the presses which first introduced the youth of America to printing. Following them came a number of machines, first

hand inkers and then self-inkers, which, aided by exhibits at the Centennial Exposition in Philadelphia, 1876, made the seventies and eighties the golden age of small printers and amateur editors. The number of different kinds made during this period is, however, too great to include in this article, and requires a separate chapter. This will be forthcoming if readers evince enough interest in these small printing presses which many of their fathers — and grandfathers — used.



Army Press

### Baby Walkers — Concluded

tured on this side of the Atlantic. To enhance the American product for export, an additional rim wheel was attached to the common hub to facilitate hand propulsion. By 1855 Joseph King established a chair factory in New York. One of his models was based on a French design. The wheels were thin steel rims without tires and the propelling mechanism was flimsy. The chair never became popular because of this.

The need of Civil War veterans spurred the American manufacturer to greater effort in the same way, as that of the English patrons at Bath. Not only were wheel-chairs produced in quantity but they were designed for heavy duty. It was not until 1882, though, that the first practical hand-propelled, sprocket-chain wheel-chair appeared on the market. And soon, thereafter, the Springfield (Vermont) Novelty Works found it feasible to advertise a low-priced (\$17 to \$50) assortment. (Some of these somewhat modified, are in use today.) Twenty years later Sears Roebuck Company forged ahead with similar models for \$10.75.

Today those who need wheel-chairs are able to rent them, and they can make their choice from 66 models.

## Early American Industries

### **The Baby-Walker and Wheel Chair in America**

by SIGMUND EPSTEIN

Human need, the driving force behind industrial development, effected style changes in baby-walkers and invalid chairs.

Baby walkers were originally an Italian invention. They were planned firstly to keep the baby within bounds, and then to assist him in standing and walking. Some time later models were evolved which were both artistic and attractive.

The earliest American examples, nevertheless, such as those used by Gordon L. Ford and Henry W. Longfellow, were simple, wide-based wooden crates without wheels or casters. They were made for comfort and stability.

English baby-walkers manufactured at this time were greatly improved by the addition of strong metal casters. It was not until about 1864, however, that Americans adopted this pattern. One style, patented by Dr. Brown, appeared as a full-page advertisement in the "American Agriculturist." It provided a much larger walking radius; offered various interchangeable attachments, such as a hobby-horse, playpen and high-chair; and allowed for adjustments to the height of the child. Baby-walkers of that day have been replaced by modern spacious play-pens that insure freedom as well as protection.

The wheel-chair has evolved during the years, just as the walking-chair did. The simplest vehicle to serve an invalid is illustrated by a marginal drawing in the Luttrell Psalter published in 1340. It shows a crippled child being transported in a wheelbarrow. Diderot's Encyclopedia of 1627 shows a more complicated device made by transforming a richly brocaded parlor-chair into an invalid chair. The sitter propelled it by turning a crank directly below the seat. This, in turn, moved cogs attached to heavy wooden wheels touching the floor. In France some fifty years later, a mechanic improved upon this by transferring the crank handles to the arms of the chair. The fashionable gouty and sporty set who visited Bath, England, each season, provided the stimulus to turn out a wide variety of Bath Chairs. All were more or less simple; some were pulled; some were pushed, and some horse-drawn.

About this time Americans imported such wheel chairs from England, because none were manufac-

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### **Street Lighting—Continued**

reflections which were thrown to left and right for a distance of 72 feet. In an official report dated 1770, M. de Sartine describes a Paris street lamp as follows: "Hexagonal form, frame of forged iron, about 14 inches high for lanterns; a horizontal silver plated copper top to reflect the light, surmounted by a domed top. The lamp had Bohemian glass sides, and contained a reservoir lamp with 1, 2, 3 or 4 spouts, backed by reflectors. In 1777 the road from Paris to Versailles was lighted its entire length, variously estimated at from 9 to 14 miles, at a cost of 15,000 francs per year. In 1788 a superior and less costly process was discovered for the purification of the field-cabbage (colza) oil for use in street lamps. One more significant development came in 1789 when the street lights were furnished with iron instead of rope cords, because it makes us realize that the cry "to the lanterns" heard during the French Revolution meant that the unfortunate aristocrat was going to be hanged by the lamp cord.

The 18th century in England saw a somewhat parallel development. About 1720 the Court of Common Council ordered that all housekeepers whose houses fronted on any street, lane or public highway, should "on every dark night, hang out one or more lights, to continue burning from 6 p.m. to 1 a.m. under penalty of one shilling." In 1729 a company contracted to light London's streets, householders having the option of hanging out their own lights or paying the company to do it. In 1736 the City Corporation obtained parliamentary powers to publicly light its streets with glass lamps, which were to be kept burning from sunset to sunrise throughout the year, and nearly 5,000 were erected. Despite this provision, link boys were in request to accompany those who could afford them, to and from social functions. Links were made of rope imbued with wax, resin or tar, forming a rigid torch. A survival of such a link was discovered in use on a railroad in Spain as late as 1892. Houses in the city of Bath and the older parts of central London show relics of 18th century lighting in the form of link extinguishers and brackets for holding oil lamps, the latter usually over the front gate. These lamps were either in the form of the more or less square street lantern or else hemispherical bowls with flat lids after the style of railway carriage lamps of the late 19th century.

The history of street lighting in this country followed the same pattern as in Europe — first private

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## The Chronicle



*Issued occasionally for members of*  
**EARLY AMERICAN  
INDUSTRIES ASS'N**

The purpose of the association is to encourage the study and better understanding of early American industry, in the home, in the shop, on the farm, and on the sea, and especially to discover, identify, classify, preserve and exhibit obsolete tools, implements, utensils, instruments, vehicles, appliances and mechanical devices used by American craftsmen, farmers, housewives, mariners, professional men and other workers.

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Communications regarding the contents of The Chronicle should be addressed to the Editor; Suggestions for members and other matters either to the President or the Secretary-Treasurer.

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Supporting Members contribute \$5.00 or more a year.

BACK NUMBERS of The Chronicle are available in some instances for fifty cents or one dollar, depending on rarity. Index to Volume I and II is available for one dollar each.

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### The Editor Comments

The Editor, while on vacation on the west coast, was unexpectedly pressed into service to fill a temporary position as Visiting Professor at the University of Oregon. The Chronicle of Early American Industries will, therefore, be issued from Eugene, Oregon for the coming year with ye olde Up-State printer in New York still doing his faithful service.

The Editor hopes not only to uncover additional material from the west coast, as the article in the last issue on Wenzel clocks will show, but also, by means of his being on the far side of the United States, to round out the picture of our Early Industries with reports of this section of our country.

Future communications until next summer should be addressed to the Editor, Early American Industries Chronicle, at the University of Oregon, Eugene, Oregon.

Industries are not old on the West Coast. There is not much likelihood of their dominating our material from the East. The backbone of our country does, as always, remain on our Eastern seaboard.

### Cooperstown Meeting

The Early American Industries Association, Inc. held its annual meeting in Cooperstown, New York, as part of a joint Seminar on American Culture held with the New York Historical Association, during the week of July 11, 1948.

The EAIA sponsored the section of the Seminar on Early Arts and Crafts, with Mr. Lewis N. Wiggins, as Chairman, and had charge of the morning sessions on each of the six days of the Seminar.

On Monday morning, Charles Messer Stow's talk on "Antiques as History" was followed by a survey tour of the Farmers' Museum so that everyone attending could become familiar with the entire layout. On Tuesday morning the time was divided between Farm Machinery under the leadership of George Campbell, Assistant Curator of the Museum, and Early Crafts under the leadership of Jared Van Wagenen. Discussions and observations were held at each group of the objects discussed in the collection.

Wednesday morning was the first meeting of the membership of EAIA with talks on Early Lighting, by Frank Doble, Malcolm Watkins and Bertram K. Little. These were illustrated by items from the Museum. Digests of the Watkins' talk is given in this issue and also that portion dealing with American lighting by Mr. Little.

Wednesday afternoon, a "Whatsit?" session was held, and members displayed many tools and utensils for identification. After considerable discussion all but a few were identified. A few items which had been brought for auction were later sold, with George Campbell acting as auctioneer.

At 4 P. M. punch was served by the Farmers' Museum in the Tap Room and the Annual business session was held immediately following the banquet at the Otesaga Hotel. Mrs. Mary Moore gave an entertaining and educational talk on "Buggy Whips," followed by an illustrated talk on the "Early Iron Industry" by Charles Rufus Harte Thursday morning, and another, also illustrated, on "Early Baby Walkers and Wheel Chairs" was given by Dr. Sigmund Epstein, the first and last are reproduced in this issue.

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## Early American Industries

### Street Lighting—Continued

and then publicly supported lighting on a small scale. In Boston there was no public system of street lighting prior to 1774. Whatever street lighting there was, was supported by private citizens, and this was only in front of their own warehouses or dwellings. Through the influence of John Hancock, the town purchased 400 lanterns in 1772. The Massachusetts Gazette for March 3, 1774 says: "Last evening 200 lamps fixed in the streets and lanes of the town (i.e. Boston) were lighted. They will be of great utility to the metropolis."

Benjamin Franklin took an interest in the street lighting of Philadelphia, which he later described in part as follows: "Just before I went to England in 1757, I brought a bill for paving the city streets into the Assembly . . . it was passed after I was gone with an additional provision for lighting as well as paving the streets . . . . The late Mr. John Clifton, by placing a lamp at his door, first impressed the people with the idea of enlightening all the city. I have only some merit to claim respecting the form of our lamps, as differing from the globe lamps we were first supply'd with from London. These we found inconvenient in these respects: they admitted no air below; the smoke therefore, did not readily go out above, but circulated in the globe, lodg'd on its inside, and soon obstructed the light, giving besides the daily trouble of wiping them clean, and an accidental stroke would demolish one. I suggested the composing them of four flat panes, with a long funnel above to draw up the smoke, crevices admitting air below to facilitate the ascent; by this means, they continu'd bright till morning, and an accidental stroke would generally break but a single pane."

There were a few minor developments in the first quarter of the 19th century along the lines of increasing the effect of street lamps by use of mirror prisms. In 1809 M. Bordier de Versoix brought out a street light using silver-plated copper reflectors, with which (it is said) he lighted the village of Beaucaire, so that one could read the figures on a watch dial, and in 1812 two of his countrymen developed the Maestricht Lantern, which had a wick that could be cut to the length of time one wished it to burn and needed no attention or adjustment. In 1821 M. Vivien de Bordeaux applied the Argand principle to street lamps.

It is the invention of illuminating gas in 1792 and the application of it to street lighting, and the de-

velopment of electric lighting, that gave real significance to the 19th century lighting. The first street to be lit by gas was Pall Mall in London, in the year 1807; Westminster Bridge was so lit in 1813, and the following year the whole Parish of Westminster set an example by substituting gas lamps for oil throughout their area. The adoption of gas for street lighting in London was followed by a rapid spread of the method. The first city in this country to adopt it was Baltimore in 1817, but there is a definite record that a Newport, Rhode Island, experimenter demonstrated a few gas lights as early as 1806. Boston had gas lights by 1822 and New York in 1823. The City of Paris on the first of January, 1819, introduced its first gas lighting with 4 burners in the Place du Carrousal, and twelve more in the rue de Rivoli.

The first gas burners were "rat-tail" burners, consisting of a metal tube closed at one end, which was perforated with a single hole. By 1808 the "cockspur" type of burner, in which the sealed tube end was pierced with three small holes, and the "cockscomb," in which the holes were more numerous, were evolved. The former gave a light of about one candle-power for every cubic foot of gas burned per hour. In 1816 came the batwing burner, and four years later the "fishtail" or first form of union jet—in which two jets were united to form a single flat flame. Experiments and advances were made in burners until the development of incandescent gas lighting in London in 1895, and the high pressure gas lighting with inverted mantles—cotton fabric impregnated with rare earths.

A real electric arc light was produced as early as 1802 by Sir Humphrey Davy, but electric street lighting systems in this country did not begin until the invention of dynamos and a little later of self-regulating arc lamps. Twelve units of these were installed in the Public Square in Cleveland in 1879. For many years only the 2,000 candle-power arc lamp was available for street lighting. The carbon filament incandescent lamp, the use of metalized carbon and tantalum-wire filaments, had little effect on street lighting, but in 1907 the invention of the tungsten-filament lamp presented real competition for the arc, not only in efficiency, but in economies made possible by the variety of sizes in such lamps. The gas-filled Mazda lamp is the last—but probably not the final development in incandescent lamps since they seem likely to be superceded by the new fluorescent lamps.

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### Communications

from MRS. JASON WESTERFIELD  
"Old High," Camden, Maine

Some years ago on one of our winterland hikes Mr. Westerfield and I came across some very peculiar barbed wire—quite an extensive field, now over-grown with bushes and young growth which covered the field. We were fortunate enough to find a piece discarded, on the ground, some yards in length and brought it home, where it now reposes along with other fascinating relics of the past in our barn chamber.

The wire is flat about a quarter or third of an inch across with the barbs soldered on by hand. We have never seen anything like it nor has the oldest inhabitant to whom we have shown it. Can anyone tell us of wire of similar make, or of its possible age?

from WILLIAM BARCLAY STEPHENS  
Alameda, California

Since the original discovery of the air clocks in San Francisco, another turned up in Schenectady, New York, which has two features not present in the California specimens. One is a dial with its hands set in the case above the movement and operated not by air impulses but by a rod attached to the movement below. The other feature is an accessory to the walking beam,—a tube attached to the beam and parallel to it. The tube is sealed at both ends and contains some quicksilver. As the lower end of the walking beam rises and reaches a point above the level of its pivoted center, the quicksilver in the tube runs to the other end of the tube with a rush and thus adds considerable force to the impulse.

#### EDITOR'S NOTE:

An article on the Wenzel Air Clock by Dr. Stephens appeared in Volume III, number 14 of *The Chronicle*. It was a reduction of a longer account on Wenzel by Dr. Stephens which appeared in the *Quarterly* of the California Historical Society. *Industries* is indebted both to the editors of that publication, and to Miss Veronica J. Sexton, librarian of The California Academy of Sciences, for allowing this material to be used. The Editor is happy to take this opportunity not only to call attention again to that article, but also to express his personal thanks to the author.

### Cooperstown Meeting—Concluded

Thursday afternoon, the members visited the remarkable collections of carts, carriages, etc. owned by F. Ambrose Clark, and provision was made for members to see the exhibits at Fenimore House and the Baseball Hall of Fame.

The subject Friday, was "Spinning and Weaving" in the spinning and weaving room under the leadership of Mr. Campbell and Miss Virginia Parslow. Mr. Campbell prepared the flax while Miss Parslow demonstrated the weaving. George H. Watson of Sturbridge Village, Massachusetts, and Loring McMillen of the Staten Island Historical Society talked on the following morning on the problems of restoration, using scale models and lantern slides.

Forty-two members were present when Mr. Durell, President, called the business meeting to order on July 14th at 8:30 P. M. The Secretary's report was read and accepted, and the Treasurer's report was also accepted and placed on file. Before appointing a nominating committee to bring in a slate for the following year, Mr. Durell suggested that the vice-presidents be increased from one to three, and that the office of secretary and treasurer likewise be increased to three: a recording secretary, a corresponding secretary and a treasurer, and it was so voted.

The nominating committee later reported the following officers for the ensuing year who were duly elected: President, Edward Durell; First Vice-President, Loring McMillen; Second Vice-President, Francis D. Brinton; Third Vice-President, Mrs. John H. Ballantine; Recording Secretary, Miss Janet R. MacFarlane; Corresponding Secretary, Mrs. Irma P. Anderson; Treasurer, Mrs. Frank D. Pierce. Directors for three years: John W. Allen, Mrs. Theodore L. Bailey, Dr. Allen Eaton, Maj. A. Erland Goyette, Charles Rufus Harte, John Davis Hatch, Jr., Warren C. Lane, Loring McMillen, Charles Messer Stow, Lewis N. Wiggins.

The question of increasing the membership was brought up and Mr. R. W. Smith of Monroe, N. Y. thought the best way was for every member to be responsible for a new member. This was unanimously voted. Mr. Ayers spoke of the new chapter in Worcester, Mass. where 10 new members signed at the organization meeting. A rising vote of thanks was given Miss MacFarlane, Mr. Campbell, Dr. Jones and Mr. Van Wagenen for all they did to make the meeting interesting and successful. A vote of thanks was given Mrs. Frank Pierce, secretary-treasurer, for work well done in these offices.

